

Notice of Allowability

Application No.

10/658,840

Examiner

John S. Chu

Applicant(s)

DAMMEL ET AL.

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/8/06.
2. ☒ The allowed claim(s) is/are 2 and 8-18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

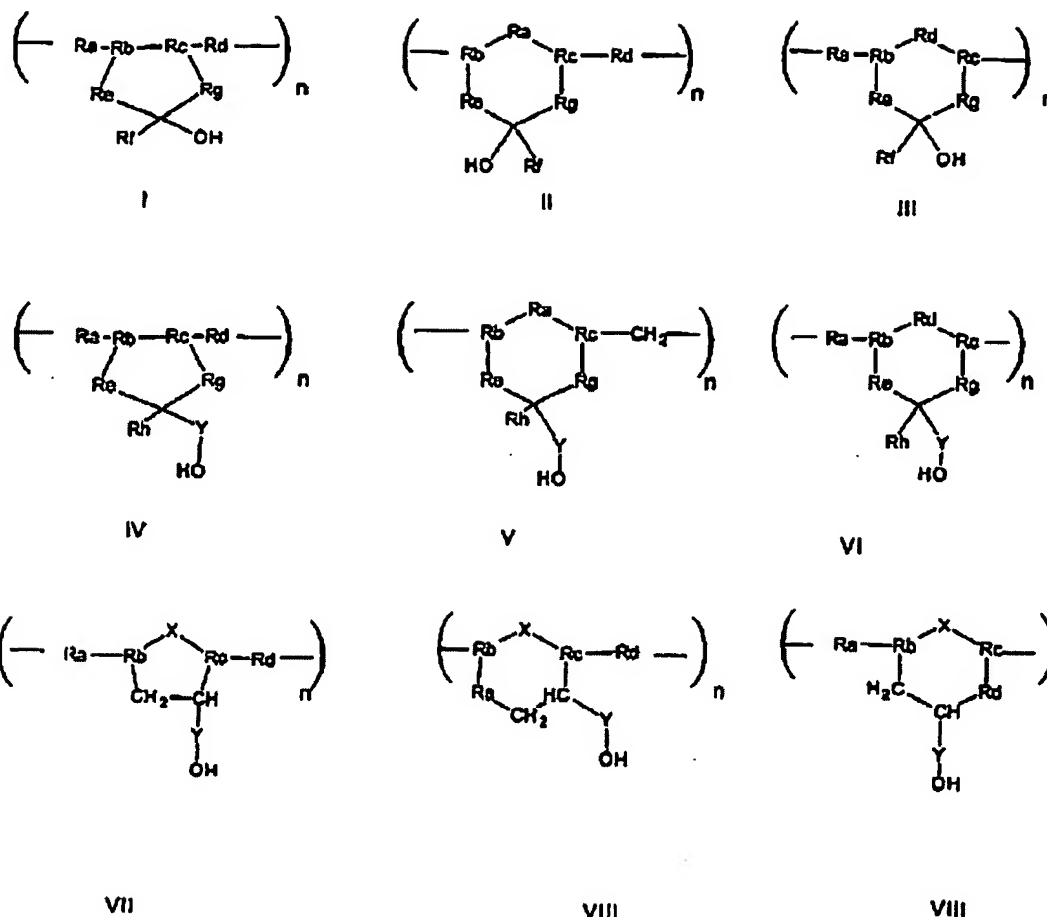
1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 3/2005 p.1
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The claimed invention is drawn to the following:

2 (currently amended). A composition comprising a photoacid generator and a fluorinated polymer, where the fluorinated polymer is a reaction product of polymer containing an aliphatic monocyclic fluoroalcohol unit with at least one compound capable of functionalizing the fluoroalcohol unit with an alkoxycarbonylalkyl group of structure $-(CR_3R_4)_p(CO)OR_5$, where R_3 and R_4 are independently H, F, (C_1-C_8) alkyl, (C_1-C_8) fluoroalkyl, cycloalkyl, cyclofluoroalkyl, $(CR_3R_4)_p(CO)OR_5$, R_3 and R_4 may combine to form an alkylspirocyclic or a fluoroalkylspirocyclic group, R_5 is H or an acid labile group, and $p=1-4$, ~~further where the fluorinated polymer in the composition has a monocyclic structure, and~~ further where the polymer containing the monocyclic fluoroalcohol unit is selected from at least one of structures I to VIII,

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where Rf is a fluoroalkyl group (C₁-C₈),

Ra, Rb, Rc, Re, Rg and Rh are independently alkyl and fluoroalkyl, and Ra-Re and Rg can independently be substituted with alkyl, fluoroalkyl, spirofluoroalkyl or spiroalkyl substituent, where at least one of Ra, Rb, Rc and Rd is a fluoroalkyl group,

Y is independently alkyl or fluoroalkyl spacer group (C₁-C₈), and

X is independently CF₂ or O.

The claimed invention finds novelty in the fluorinated polymer, which is a reaction product of a polymer having a formula I – VIII with an alkylcarbonylalkyl group as seen in claim

2. None of the prior art references of record disclose the recited polymer wherein at least one of Ra, Rb, Rc and Rd is a fluoroalkyl group.

The newly cited references fail to disclose the claimed composition. NISHIMURA et al (6,800,414) and FEIRING et al (6,790,587) and (6,849,377 disclose alicyclic polymer containing compositions, however none of the polymers in these references disclose a fluoroalkyl group as claimed in the polymer backbone with the particularly claimed acid labile group (alkyloxycarbonylalkyl group).

ARAKI et al (6,908,724) is cited of interest, however is not prior art under 35 U.S.C. 102(e) for failing to meet the statutory requirements for an International application. Further the provisional application was filed (August 14, 2003) after the current filing date of this application.

Likewise FEDYNYSDHYN et al lacks the claimed polymer resin in the composition having an oxygen or CF₃ group in the backbone as claimed in formula VII.

Because none of the prior art references of record disclose or anticipate the claimed invention, claims 2, and 8-18 are seen as allowable and passed to issue.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

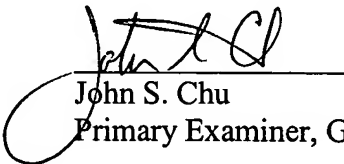
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chu whose telephone number is (571) 272-1329. The examiner can normally be reached on Monday - Friday from 9:30 am to 6:00 pm.

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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Cynthia Kelly, can be reached on (571) 272-1526

The fax phone number for the USPTO is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PMR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John S. Chu
Primary Examiner, Group 1700

J.Chu
September 4, 2006